AD-A117 287 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
140898 LANCE MISSILE NUMBER 4580 ROUND NUMBER 377-APT.(U)
MAY 82 D C KELLER

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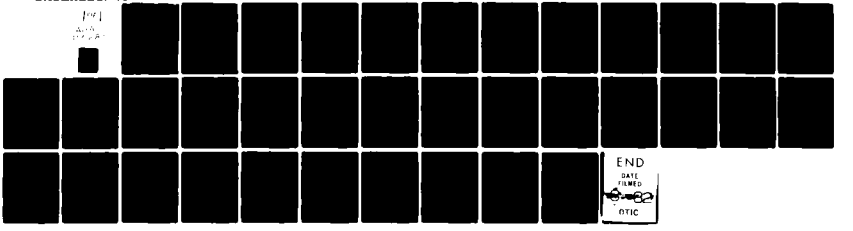

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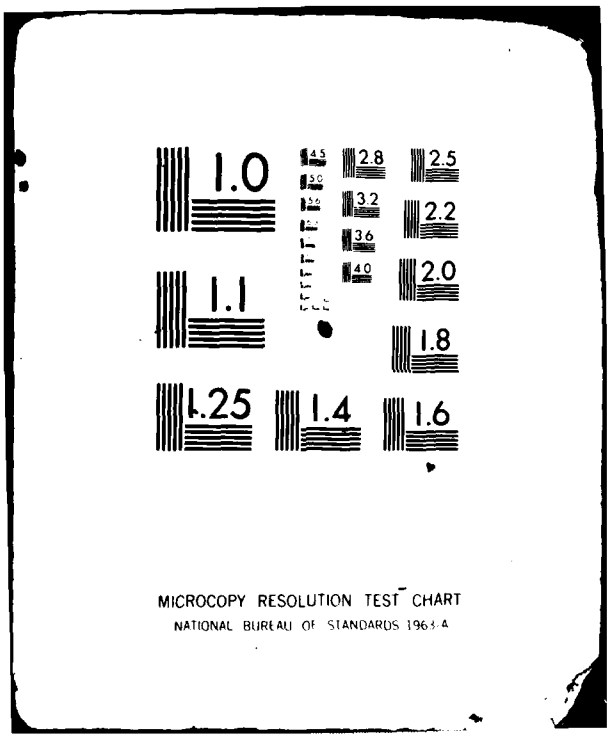
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1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
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4.0
4.5
5.0
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

DR 1241
May 82
AD

METEOROLOGICAL DATA REPORT
14820B Lance
Missile Number 4580
Round Number 377-APT
17 May 1982

by

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AVN Number 349-9568

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM
UNITED STATES ARMY ELECTRONICS COMMAND

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1. REPORT NUMBER DR 1241	2. GOVT ACCESSION NO. AD-A1[illegible]	3. RECIPIENT'S CATALOG NUMBER
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20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

Meteorological data gathered for the launching of the 14820B Lance, Missile Number 4580, Round Number 377-APT presented in tabular form.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

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CONTENTS

INTRODUCTION

14820B Lance, Missile Number 4580, Round Number 377-APT, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 0901:06 MDT, 17 May 1982. The scheduled launch time was 0900 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature (°C), relative humidity, dew point (°C), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-39 Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

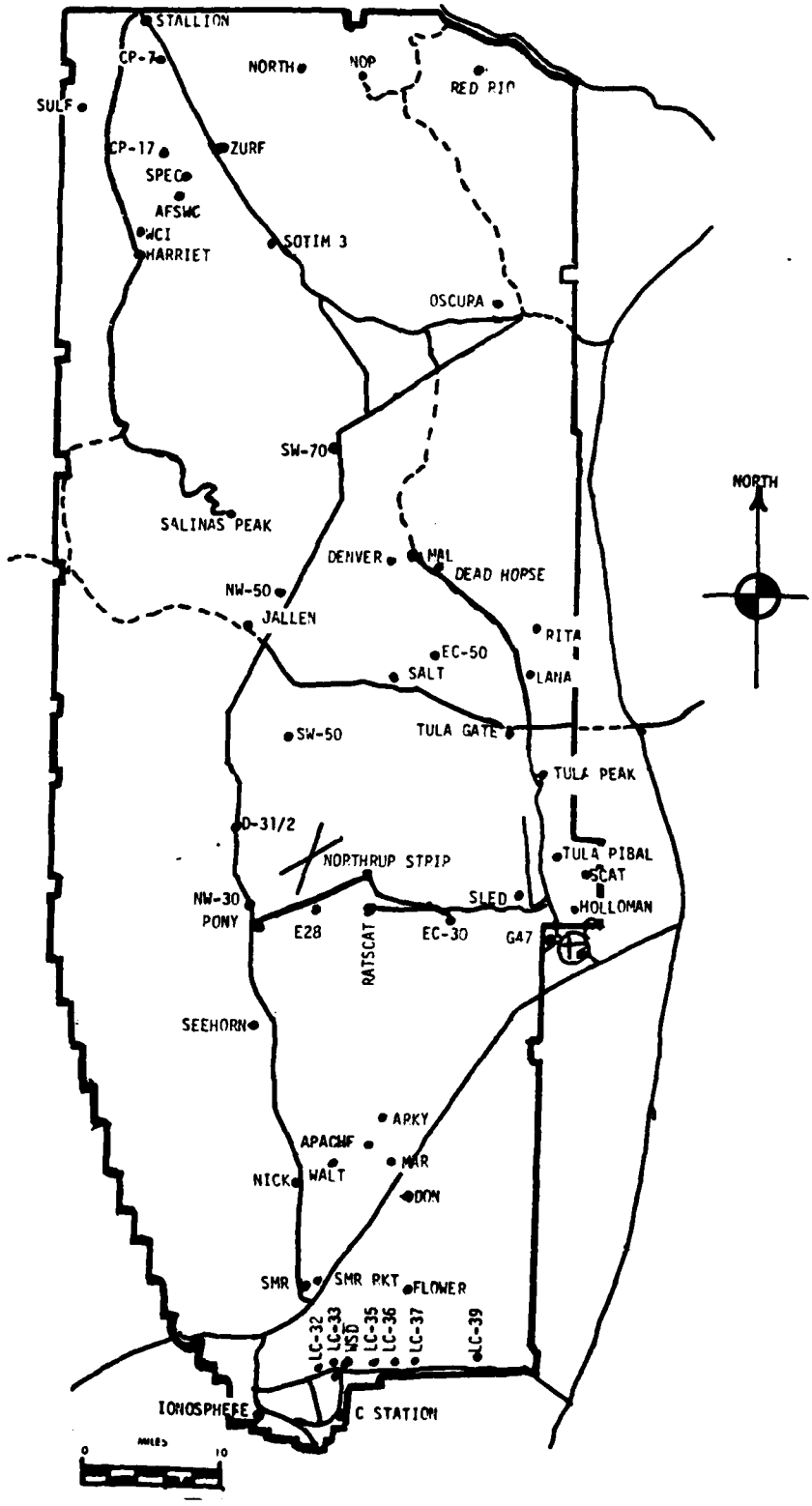
(1) Low level wind data were obtained form RAPTS T-9 pibal observations at:

SITE AND ALTITUDE	
LC-36	3660 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME	
LC-37	0900 MDT (Launch Area Data)
Jallen	0730 MDT (Mid-course Data)
AFSWC	0850 MDT (Impact Area Data)

WSMR METEOROLOGICAL SITES



PROJECT SURFACE OBSERVATION

TABLE 1 STATION LC-39

DATE 17 (DAY) May (MONTH) 82 (YEAR) X= 530,938.82 Y=186,564.96 H= 4,063.75

TIME M D T	PRESSURE mbs	TEMPERATURE °F	TEMPERATURE °C	DEW POINT °F	DEW POINT °C	RELATIVE HUMIDITY %	DENSITY	WIND DIRECTION degs Tn	WIND SPEED kts	WIND CHARACTER kts	VISIBILITY
0901	876.5		21.5		1.1	26	1032		CALM		40

OBSTRUCTIONS TO VISIBILITY	CLOUDS 1st LAYER AMT	1st LAYER TYPE	1st LAYER HGT	2nd LAYER AMT	2nd LAYER TYPE	2nd LAYER HGT	3rd LAYER AMT	3rd LAYER TYPE	3rd LAYER HGT	REMARKS
	0	CU	6,000							FEW CU NW HALQDS

PSYCHROMETRIC COMPUTATION

TIME:	0901		
DRY BULB TEMP.	21.5		
WET BULB TEMP.	10.6		
WET BULB DEPR.	10.9		
DEW POINT	1.1		
RELATIVE HUMID.	26		

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM LC-36 DATE 17 May 82 TIME 0851 MDT

COORDINATES (METER) X = 504,466.00 Y = 190,732.16 H = 4,037.21

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	150	03
60	140	03
120	125	03
180	124	05
240	121	05
300	120	05
360	135	04
420	178	03
480	240	05
540	293	09
600	325	10
660	336	08
720	345	07
780	351	07
840	012	09
900	033	12
960	016	11
1020	015	08
1080	067	06
1140	043	05
1200	043	05
1260	035	07
1320	031	06
1380	095	06
1440	231	07
1500	290	06
1560	263	05
1620	244	07
1680	235	09
1740	265	10
1800	274	12
1860	275	12
1920	276	15
1980	278	17
2040	272	18
2100	278	20
2160	290	21
2220	288	22
2280	284	23
2340	284	22
2400	285	21
2460	285	23
2520	285	23
2580	284	25
2640	284	23
2700	284	22
2760	282	21
2820	287	23
2880	283	23
2940	273	24
3000	273	26
3060	274	27
3120	276	29
3180	277	28
3240	271	25
3300	264	24
3360	269	23
3420	275	24
3480	280	25
3540	284	21
3600	288	20
3660	274	21

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM LC-36 DATE 17 May 82 TIME 0901 MDT

COORDINATES (WSTM) X= 504,466.00 Y= 190,782.16 H= 4,037.21

HEIGHTS ARE METERS AGL X OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	150	03
60	145	03
120	138	04
180	140	05
240	146	05
300	154	04
360	170	05
420	178	05
480	180	03
540	253	04
600	330	07
660	339	08
720	352	08
780	009	06
840	015	05
900	011	05
960	017	05
1020	036	06
1080	041	06
1140	053	08
1200	058	05
1260	058	04
1320	078	06
1380	084	06
1440	063	05
1500	070	03
1560	109	02
1620	157	02
1680	224	01
1740	264	04

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
1800	272	06
1860	281	08
1920	289	14
1980	272	15
2040	252	14
2100	242	16
2160	259	16
2220	284	17
2280	282	18
2340	281	19
2400	284	20
2460	288	20
2520	287	20
2580	287	20
2640	286	20
2700	285	22
2760	283	23
2820	280	24
2880	280	25
2940	281	26
3000	279	28
3060	276	27
3120	276	26
3180	275	25
3240	271	25
3300	274	24
3360	273	23
3420	273	23
3480	281	20
3540	283	20

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
3600	283	20
3660	285	21

TABLE 4

COMPUTER MET MESSAGES

17 May 1982

LC-37 0900 MDT		JALLEN 0730 MDT		AFSWC 0850 MDT	
METCM1324063		METCM1332065		METCM1336066	
171500124878		171350124877		171480143856	
00000000	29080878	00604002	28960877	00000000	28700856
01212002	29250868	01002003	29010867	01489003	28680846
02182003	29080843	02081003	29090842	02003005	28890821
03017007	28970804	03039001	28860803	03032006	28730783
04115005	28550758	04042006	28510757	04592004	28320738
05487008	28120713	05632002	28070713	05505003	27890694
06502017	27680671	06412004	27590670	06459007	27440653
07495018	27180631	07486007	27120630	07439013	26960613
08488021	26800592	08477012	26650591	08470014	26490575
09489018	26500555	09479019	26300554	09489015	26140539
10493023	26190521	10495019	25950519	10506017	25790505
11500030	25830488	11490023	25670486	11512021	25460472
12505031	25180441	12498026	25110439	12512025	24890427
13499033	24310384	13505032	24250383	13531033	24090371
14506037	23420333	14515036	23390332	14529035	23250322
15510040	22460287	15520035	22540286	15521036	22470277
16525048	22170247	16516045	21980246	16530039	22110238
17497051	22090212	17501054	22090210	17522046	22070204
18488056	22000181	18492050	22090180	18508048	21970175
19486047	21970155	19487047	21930155	19493048	21920150
20489039	21530133	20473035	21600132	20482039	21640128
21460040	21090113	21467038	21080113	21467036	21170109
22497023	20950096	22495037	20900096	22491031	21130093
23485006	21210082	23456014	21210082	23492008	21390079
24145014	21300070	24085012	21300070	24158018	21220068
25255011	21180060	25188012	21280059	25275008	21230058
26211011	21740051	26147005	21530051	26203006	21620049

STATION ALTITUDE 4051.37 FEET MSL
17 MAY 82 0900 MDT
ASCENSION NO. 45

SIGNIFICANT LEVEL DATA
1370180045
LC-37
TABLE 5

GEODETIC COORDINATES
32.40175 LAT DEG
106.51232 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT	REL.HUM. PERCENT
877.7	4051.4	17.0	-.2	31.0
871.6	4247.3	19.3	2.2	32.0
850.0	4952.7	17.0	2.2	37.0
838.4	5336.9	16.3	.8	35.0
816.0	6094.0	16.8	1.7	36.0
700.0	10304.5	6.2	-7.4	37.0
656.6	12013.9	1.5	-10.6	40.0
614.6	13747.2	-3.8	-14.2	44.0
564.8	15925.1	-7.6	-23.7	26.0
500.0	19009.3	-13.4	-28.3	27.0
441.0	22104.0	-21.4	-34.3	30.0
400.0	24441.7	-27.8	-39.0	33.0
330.2	28873.1	-39.1	-49.5	32.0
300.0	31010.1	-45.1		
270.0	33303.5	-49.8		
250.0	34955.3	-51.5		
231.4	36605.2	-52.4		
226.4	37071.3	-51.6		
216.0	38075.0	-52.3		
201.4	39567.0	-52.2		
200.0	39715.5	-52.7		
191.8	40605.3	-53.2		
182.6	41649.6	-52.9		
178.2	42167.2	-53.8		
169.2	43267.4	-52.7		
156.6	44913.8	-52.9		
150.0	45827.4	-54.0		
119.0	50645.3	-61.4		
108.8	52471.0	-63.2		
100.0	54179.8	-63.8		
91.0	56087.7	-63.9		
87.4	56908.5	-61.7		
81.8	58263.8	-61.2		
80.8	58516.3	-60.4		
78.1	59214.1	-61.2		
76.6	59613.2	-59.5		
70.0	61474.8	-59.5		
61.0	64286.9	-64.3		
58.6	65103.0	-61.7		
56.2	65968.2	-56.9		

STATION ALTITUDE 4651.37 FEET MSL
17 MAY 82 0900 MDT
ASCENSION NO. 45

SIGNIFICANT LEVEL DATA
13701[illegible]
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 5 Cont'd

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
50.0	68422.3	-55.5		
49.0	68848.1	-55.2		
41.2	72499.4	-56.0		
37.8	74329.9	-51.3		
35.6	75616.1	-52.0		
30.0	79304.7	-49.3		
26.4	82082.9	-48.4		
20.0	88179.8	-44.8		
16.4	92604.6	-41.7		

STATION ALTITUDE 4,051.37 FEET MSL
17 MAY 82 0900 MDT
ASCENSION NO. 45

UPPER AIR DATA
13701[illegible]045
LC-37
TABLE 6

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.4	877.7	17.0	-.2	31.0	1051.1	664.5	.0	.0	1.000261
4500.0	863.8	18.5	2.3	33.8	1028.0	666.3	29.1	.8	1.000261
5000.0	848.6	16.9	2.1	36.8	1015.9	664.6	29.1	1.8	1.000258
5500.0	833.5	16.4	1.0	35.2	999.8	663.9	29.1	2.7	1.000253
6000.0	818.7	16.7	1.6	35.9	980.6	664.3	11.5	4.9	1.000249
6500.0	804.0	15.8	.8	36.1	968.5	663.2	8.6	6.5	1.000245
7000.0	789.5	14.5	-.3	36.2	953.4	661.7	20.4	5.8	1.000240
7500.0	775.3	13.3	-1.3	36.3	940.4	660.2	42.6	5.1	1.000235
8000.0	761.3	12.0	-2.4	36.5	927.7	658.7	59.3	4.2	1.000231
8500.0	747.5	10.7	-3.5	36.6	915.1	657.2	61.2	2.1	1.000226
9000.0	734.1	9.5	-4.6	36.7	902.7	655.7	277.1	1.3	1.000222
9500.0	720.8	8.2	-5.6	36.8	890.5	654.2	276.0	5.5	1.000218
10000.0	707.8	7.0	-6.7	36.9	878.5	652.7	278.4	10.3	1.000214
10500.0	694.9	5.7	-7.7	37.3	866.6	651.1	282.2	13.5	1.000210
11000.0	682.0	4.3	-8.7	38.2	854.9	649.5	283.8	16.3	1.000206
11500.0	669.4	2.9	-9.6	39.1	843.3	647.8	281.0	16.9	1.000203
12000.0	656.9	1.5	-10.6	40.0	831.8	646.2	279.2	17.4	1.000199
12500.0	644.5	.0	-11.6	41.1	820.8	644.4	278.9	17.3	1.000196
13000.0	632.4	-1.5	-12.6	42.3	809.9	642.5	278.6	18.4	1.000192
13500.0	620.4	-3.0	-13.7	43.4	799.1	640.7	278.3	20.4	1.000189
14000.0	608.6	-4.2	-15.2	41.9	787.5	639.2	276.8	21.1	1.000185
14500.0	596.9	-5.1	-17.2	37.8	775.0	638.1	274.6	21.2	1.000181
15000.0	585.4	-6.0	-19.4	33.6	762.7	637.0	274.6	19.8	1.000177
15500.0	574.2	-6.9	-21.7	29.5	750.6	636.0	275.1	18.2	1.000173
16000.0	563.1	-7.7	-23.8	26.0	738.7	634.9	275.8	17.8	1.000169
16500.0	552.1	-8.7	-24.6	26.2	726.8	633.7	274.9	17.9	1.000166
17000.0	541.3	-9.6	-25.3	26.3	715.2	632.6	274.5	19.2	1.000164
17500.0	530.7	-10.6	-26.1	26.5	703.7	631.5	275.6	21.0	1.000161
18000.0	520.3	-11.5	-26.8	26.7	692.5	630.3	277.7	23.4	1.000158
18500.0	510.2	-12.4	-27.6	26.8	681.4	629.2	279.2	25.8	1.000155
19000.0	500.2	-13.4	-28.3	27.0	670.5	628.0	280.3	28.1	1.000153
19500.0	490.1	-14.7	-29.3	27.5	660.3	626.5	281.0	29.7	1.000150
20000.0	480.3	-16.0	-30.2	28.0	650.3	624.9	281.5	31.2	1.000148
20500.0	470.7	-17.3	-31.2	28.4	640.5	623.3	282.2	31.3	1.000145
21000.0	461.2	-18.5	-32.1	28.9	630.8	621.7	282.9	31.3	1.000143
21500.0	451.9	-19.8	-33.1	29.4	621.3	620.1	283.1	31.2	1.000141
22000.0	442.9	-21.1	-34.1	29.9	612.0	618.5	283.4	31.1	1.000138
22500.0	433.8	-22.5	-35.1	30.5	602.7	616.9	284.4	30.9	1.000136
23000.0	424.8	-23.9	-36.1	31.1	593.5	615.2	285.4	30.7	1.000134
23500.0	416.0	-25.2	-37.1	31.8	584.4	613.5	285.7	31.8	1.000132

STATION ALTITUDE 4051.37 FEET MSL
17 MAY 62 0900 MDT
ASCENSION NO. 45

UPPER AIR DATA
1370180045
LC-37
TABLE 6 Cont'd

GEODETIC COORDINATES
32.40175 LAT DEG
106.51232 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	407.4	-26.6	-38.1	32.4	575.6	611.8	285.9	32.9	1.000130
24500.0	399.0	-27.9	-39.2	33.0	566.8	610.1	283.4	33.4	1.000128
25000.0	390.5	-29.2	-40.3	32.9	557.5	608.5	280.5	33.9	1.000125
25500.0	382.1	-30.5	-41.5	32.8	548.5	606.9	278.9	33.8	1.000123
26000.0	373.9	-31.8	-42.7	32.6	539.8	605.3	277.5	33.5	1.000121
26500.0	365.9	-33.0	-43.9	32.5	530.8	603.7	276.5	34.0	1.000119
27000.0	358.1	-34.3	-45.0	32.4	522.3	602.1	280.4	34.9	1.000117
27500.0	350.4	-35.6	-46.2	32.3	513.8	600.5	281.4	35.7	1.000115
28000.0	342.9	-36.9	-47.4	32.2	505.5	598.9	282.0	36.4	1.000113
28500.0	335.6	-38.1	-48.6	32.1	497.4	597.2	283.3	36.7	1.000111
29000.0	328.3	-39.5	-50.3	30.1**	489.4	595.6	285.1	36.9	1.000109
29500.0	321.0	-40.9	-53.9	22.6**	481.4	593.8	286.0	37.5	1.000107
30000.0	313.9	-42.3	-58.4	15.1**	473.6	592.0	286.0	38.7	1.000106
30500.0	306.9	-43.7	-64.7	7.6**	466.0	590.2	284.9	39.5	1.000104
31000.0	300.1	-45.1	-90.0	.2**	458.4	588.4	282.6	40.1	1.000102
31500.0	293.3	-46.1			450.1	587.0	282.3	40.2	1.000100
32000.0	286.7	-47.1			441.8	585.7	285.9	39.4	1.000098
32500.0	280.2	-48.2			433.8	584.4	289.6	39.2	1.000097
33000.0	273.8	-49.2			425.9	583.0	293.2	40.9	1.000095
33500.0	267.5	-50.0			417.7	582.0	296.1	42.7	1.000093
34000.0	261.4	-50.5			409.0	581.3	296.0	44.4	1.000091
34500.0	255.4	-51.0			400.5	580.6	296.0	46.0	1.000089
35000.0	249.5	-51.5			392.1	580.0	296.3	47.4	1.000087
35500.0	243.7	-51.8			383.5	579.6	296.6	48.8	1.000085
36000.0	238.1	-52.1			375.1	579.3	293.4	48.7	1.000084
36500.0	232.5	-52.3			366.9	578.9	289.5	49.6	1.000082
37000.0	227.2	-51.7			357.4	579.7	285.9	48.0	1.000080
37500.0	221.9	-51.9			349.4	579.5	282.2	47.3	1.000078
38000.0	216.8	-52.2			341.8	579.0	280.5	48.9	1.000076
38500.0	211.7	-52.3			333.9	579.0	280.0	51.8	1.000074
39000.0	206.8	-52.2			326.2	579.0	279.3	54.0	1.000073
39500.0	202.0	-52.2			318.5	579.1	278.4	55.5	1.000071
40000.0	197.3	-52.9			312.1	578.2	277.7	56.4	1.000069
40500.0	192.8	-53.1			305.2	577.9	277.4	56.5	1.000068
41000.0	188.3	-53.1			298.0	577.9	277.1	56.7	1.000066
41500.0	183.9	-52.9			290.9	578.1	275.7	56.6	1.000065
42000.0	179.6	-53.5			284.9	577.4	274.1	56.5	1.000063
42500.0	175.4	-53.5			278.2	577.4	272.3	54.9	1.000062
43000.0	171.3	-53.0			271.1	578.1	270.1	51.5	1.000060
43500.0	167.4	-52.7			264.5	578.4	268.3	48.8	1.000059

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.37 FEET MSL
17 MAY 62
ASCENSION NO. 450900 MDT

UPPER AIR DATA
13701600M5
LC-37
TABLE 6 Cont'd

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	163.5	-52.8			258.4	578.3	270.0	49.2	1.000058
44500.0	159.7	-52.8			252.5	578.2	271.6	49.6	1.000056
45000.0	156.0	-53.0			246.8	578.0	273.5	49.5	1.000055
45500.0	152.3	-53.6			241.7	577.2	275.3	49.3	1.000054
46000.0	148.8	-54.3			236.8	576.4	275.1	47.3	1.000053
46500.0	145.2	-55.0			232.0	575.4	273.0	43.7	1.000052
47000.0	141.8	-55.8			227.2	574.3	270.9	40.0	1.000051
47500.0	138.4	-56.6			222.6	573.3	270.3	36.1	1.000050
48000.0	135.1	-57.3			218.1	572.3	269.5	32.2	1.000049
48500.0	131.9	-58.1			213.7	571.3	274.3	31.7	1.000048
49000.0	128.8	-58.9			209.4	570.3	279.7	32.0	1.000047
49500.0	125.7	-59.6			205.1	569.3	272.8	34.4	1.000046
50000.0	122.7	-60.4			201.0	568.2	261.5	39.3	1.000045
50500.0	119.8	-61.2			196.9	567.2	255.2	43.9	1.000044
51000.0	116.9	-61.7			192.7	566.4	253.3	46.3	1.000043
51500.0	114.1	-62.2			188.5	565.8	252.6	48.1	1.000042
52000.0	111.3	-62.7			184.3	565.1	254.3	43.1	1.000041
52500.0	108.6	-63.2			180.3	564.5	278.3	40.3	1.000040
53000.0	106.0	-63.4			176.0	564.2	284.9	36.1	1.000039
53500.0	103.4	-63.6			171.9	564.0	290.0	31.1	1.000038
54000.0	100.9	-63.7			167.8	563.8	291.0	27.8	1.000037
54500.0	98.4	-63.8			163.8	563.7	285.0	26.5	1.000036
55000.0	96.0	-63.8			159.8	563.6	280.0	24.7	1.000036
55500.0	93.7	-63.9			155.9	563.6	277.6	21.1	1.000035
56000.0	91.4	-63.9			152.2	563.6	275.2	17.5	1.000034
56500.0	89.2	-62.8			147.7	563.0	274.7	13.1	1.000033
57000.0	87.0	-61.7			143.3	562.5	273.7	8.8	1.000032
57500.0	84.9	-61.5			139.7	562.8	274.3	8.5	1.000031
58000.0	82.9	-61.3			136.3	563.0	275.0	8.3	1.000030
58500.0	80.9	-60.5			132.4	563.2	277.4	6.9	1.000029
59000.0	78.9	-61.0			129.6	563.5	283.3	4.7	1.000029
59500.0	77.0	-60.0			125.9	563.8	294.2	2.7	1.000028
60000.0	75.2	-59.5			122.6	564.4	323.2	1.0	1.000027
60500.0	73.4	-59.5			119.7	564.4	70.0	1.4	1.000027
61000.0	71.6	-59.5			116.6	564.4	86.7	0.8	1.000026
61500.0	69.9	-59.5			114.0	564.4	88.6	12.3	1.000025
62000.0	68.2	-60.4			111.7	564.2	93.5	18.0	1.000025
62500.0	66.6	-61.2			109.4	564.1	98.0	23.8	1.000024
63000.0	65.0	-62.1			107.2	564.0	102.0	27.0	1.000024
63500.0	63.4	-63.0			105.1	564.8	110.6	22.8	1.000023

STATION ALTITUDE 4651.7 FEET MSL
17 MAY 82 0900 MDT
ASCENSION NO. 45

UPPER AIR DATA
1370180045
LC-37

TABLE 6 Cont'd

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64000.0	61.9	-63.8			102.9	565.7	123.1	19.5	1.000023
64500.0	60.4	-63.6			100.4	565.9	132.9	14.6	1.000022
65000.0	58.9	-62.0			97.2	566.1	150.6	10.2	1.000022
65500.0	57.5	-59.5			93.7	569.4	157.7	8.9	1.000021
66000.0	56.1	-56.9			90.4	572.9	149.9	9.0	1.000020
66500.0	54.8	-56.6			88.1	573.3	143.0	9.3	1.000020
67000.0	53.5	-56.3			86.0	573.7	137.7	9.4	1.000019
67500.0	52.2	-56.0			83.8	574.0	132.5	9.6	1.000019
68000.0	51.0	-55.7			81.7	574.4	125.9	8.3	1.000018
68500.0	49.8	-55.4			79.7	574.8	116.4	6.9	1.000018
69000.0	48.6	-55.2			77.8	575.1	110.8	6.4	1.000017
69500.0	47.5	-55.3			76.0	575.0	110.9	6.3	1.000017
70000.0	46.4	-55.5			74.2	574.8	111.7	6.3	1.000017
70500.0	45.3	-55.6			72.5	574.7	115.6	6.6	1.000016
71000.0	44.2	-55.7			70.9	574.5	119.6	7.0	1.000016
71500.0	43.2	-55.8			69.2	574.4	116.7	5.6	1.000015
72000.0	42.2	-55.9			67.6	574.2	108.4	3.9	1.000015
72500.0	41.2	-56.0			66.1	574.1	85.4	3.7	1.000015
73000.0	40.2	-54.7			64.2	575.8	69.3	6.0	1.000014
73500.0	39.3	-53.4			62.3	577.5	62.6	8.6	1.000014
74000.0	38.4	-52.1			60.5	579.2	72.8	12.6	1.000013
74500.0	37.5	-51.4			58.9	580.1	77.9	16.8	1.000013
75000.0	36.6	-51.7			57.6	579.8	87.0	18.1	1.000013
75500.0	35.8	-51.9			56.4	579.4	100.1	18.2	1.000013
76000.0	35.0	-51.7			55.0	579.7	112.1	18.5	1.000012
76500.0	34.2	-51.4			53.7	580.2	123.4	16.2	1.000012
77000.0	33.4	-51.0			52.4	580.7	137.6	14.7	1.000012
77500.0	32.6	-50.6			51.1	581.2	142.7	12.3	1.000011
78000.0	31.9	-50.3			49.8	581.6	143.1	9.3	1.000011
78500.0	31.1	-49.9			48.6	582.1	142.2	6.6	1.000011
79000.0	30.4	-49.5			47.4	582.6	134.6	5.2	1.000011
79500.0	29.7	-49.2			46.3	583.0	121.7	3.9	1.000010
80000.0	29.1	-49.1			45.2	583.2	76.1	2.9	1.000010
80500.0	28.4	-48.9			44.1	583.4	30.3	4.4	1.000010
81000.0	27.7	-48.8			43.1	583.6	11.3	6.3	1.000010
81500.0	27.1	-48.6			42.1	583.8	355.1	7.0	1.000009
82000.0	26.5	-48.4			41.1	584.0	342.7	8.1	1.000009
82500.0	25.9	-48.2			40.1	584.4	338.4	9.0	1.000009
83000.0	25.3	-47.9			39.2	584.7	335.7	9.8	1.000009
83500.0	24.8	-47.6			38.2	585.1	333.5	10.6	1.000009

STATION ALTITUDE 4051.37 FEET MSL
17 MAY 82 0900 MDT
ASCENSION NO. 45

UPPER AIR DATA
13701800045
LC-37
TABLE 6 Cont'd

GEODETIC COORDINATES
32.40175 LAT DEG
106.31252 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
84000.0	24.2	-47.3			37.3	585.5	338.8	11.3	1.000008
84500.0	23.6	-47.0			36.4	585.9	344.4	12.2	1.000008
85000.0	23.1	-46.7			35.6	586.3	349.2	13.1	1.000008
85500.0	22.6	-46.4			34.7	586.7	350.7	13.1	1.000008
86000.0	22.1	-46.1			33.9	587.0	352.1	13.0	1.000008
86500.0	21.6	-45.8			33.1	587.4	353.6	12.9	1.000007
87000.0	21.1	-45.5			32.3	587.8	355.5	8.0	1.000007
87500.0	20.6	-45.2			31.5	588.2	3.2	3.2	1.000007
88000.0	20.2	-44.9			30.6	588.6	141.0	1.7	1.000007
88500.0	19.7	-44.6			30.0	589.0	86.3	3.8	1.000007
89000.0	19.3	-44.2			29.3	589.4	74.2	6.7	1.000007
89500.0	18.9	-43.9			28.6	589.9	68.2	9.6	1.000006
90000.0	18.4	-43.5			28.0	590.3	49.2	10.8	1.000006
90500.0	18.0	-43.2			27.3	590.8	35.2	12.9	1.000006
91000.0	17.6	-42.8			26.7	591.2			1.000006
91500.0	17.2	-42.5			26.0	591.7			1.000006
92000.0	16.9	-42.1			25.4	592.1			1.000006
92500.0	16.5	-41.8			24.8	592.6			1.000006

STATION ALTITUDE 4051.37 FEET MSL
17 MAY 82
ASCENSION NO. 45 0900 MDT

MANDATORY LEVELS
13701[illegible]045
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.51232 LON DEG

TABLE 7

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS
850.0	4949.	17.0	2.2	37.	29.1	1.7
800.0	6641.	15.4	.5	36.	13.4	6.3
750.0	8422.	11.0	-3.3	37.	63.8	2.5
700.0	10294.	6.2	-7.4	37.	280.8	12.3
650.0	12268.	.7	-11.1	41.	279.0	17.3
600.0	14353.	-4.9	-16.7	39.	275.4	21.2
550.0	16582.	-8.9	-24.7	26.	274.8	18.1
500.0	18983.	-13.4	-28.3	27.	280.3	26.1
450.0	21580.	-20.1	-33.3	30.	283.1	31.2
400.0	24401.	-27.8	-39.0	33.	283.8	33.4
350.0	27499.	-35.7	-46.3	32.	281.5	35.7
300.0	30949.	-45.1			282.7	40.1
250.0	34879.	-51.5			290.3	47.3
200.0	39620.	-52.7			276.0	56.0
175.0	42443.	-53.4			272.2	54.7
150.0	45704.	-54.0			275.9	46.7
125.0	49493.	-59.8			270.0	35.3
100.0	54012.	-63.8			289.2	27.4
80.0	58527.	-60.6			279.2	0.0
70.0	61264.	-59.5			88.5	11.7
60.0	64390.	-63.2			135.2	15.7
50.0	68165.	-55.5			118.8	7.2
40.0	72831.	-54.4			67.7	6.5
30.0	78965.	-49.3			128.7	4.5
25.0	82899.	-47.7			334.6	10.1
20.0	87765.	-44.8			116.8	2.0

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
17 MAY 82 0730 MDT
ASCENSION NO. 44

SIGNIFICANT LEVEL DATA
13700 30044
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 8

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT
877.2	4051.0	15.6	1.7	39.0
850.0	4930.6	17.0	1.4	35.0
839.5	5278.6	17.1	1.5	35.0
735.8	8922.6	9.6	-4.0	38.0
700.0	10272.6	5.4	-6.2	43.0
640.3	12638.6	-1.2	-10.0	51.0
583.2	15056.7	-8.1	-13.1	67.0
562.5	15976.9	-9.8	-20.5	24.0
540.8	16972.3	-11.2	-29.6	20.0
514.0	18246.8	-14.6	-23.9	45.0
500.0	18933.4	-15.7	-27.0	37.0
472.6	20326.6	-17.5	-36.0	18.0
423.0	23020.6	-24.5	-40.5	21.0
400.0	24350.8	-28.0	-42.6	23.0
337.5	28281.3	-38.3	-51.2	24.0
300.0	30909.1	-45.2		
275.9	32731.4	-49.8		
250.0	34834.2	-54.2		
244.0	35346.3	-55.0		
239.9	35704.2	-53.4		
212.9	38243.2	-52.1		
200.0	39576.8	-52.0		
191.9	40459.4	-51.9		
184.1	41343.3	-53.0		
176.2	42277.7	-51.9		
160.5	44266.1	-53.0		
150.0	45698.5	-54.8		
144.5	46486.5	-54.6		
122.1	50002.2	-59.5		
101.5	53755.9	-66.3		
100.0	54054.0	-65.7		
84.1	57573.8	-60.0		
79.5	58725.9	-62.6		
74.9	59949.7	-59.0		
70.0	61345.5	-60.6		
56.1	65899.8	-60.3		
51.7	67586.7	-59.1		
50.0	68282.3	-57.2		
42.8	71569.8	-52.2		
33.7	76635.1	-56.4		

STATION ALTITUDE 4051.0 FEET MSL
17 MAY 82 0730 MDT
ASCENSION NO. 44

SIGNIFICANT LEVEL DATA
13700[illegible]
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 8 Cont'd

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT	REL.HUM. PERCENT
30.0	79106.6	-51.1		
25.2	82869.8	-47.3		
20.0	87971.7	-45.3		
19.8	88193.6	-45.4		

STATION ALTITUDE 4051.00 FEET MSL
17 MAY 82 0730 MDT
ASCENSION NO. 44

UPPER AIR DATA
1370030044
JALLEN
TABLE 9

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.0	871.2	15.6	1.7	39.0	1055.2	663.0	340.0	1.9	1.000267
4500.0	860.2	16.3	1.6	37.0	1035.7	663.8	340.1	1.6	1.000262
5000.0	847.9	17.0	1.5	35.0	1014.9	664.6	335.9	1.3	1.000257
5500.0	836.8	16.6	1.2	35.2	996.1	664.2	10.7	1.1	1.000252
6000.0	817.9	15.6	.5	35.6	983.6	663.0	31.4	1.0	1.000248
6500.0	805.2	14.6	-.3	36.0	969.7	661.8	25.9	2.0	1.000243
7000.0	788.8	13.6	-1.1	36.4	955.8	660.5	23.1	3.1	1.000239
7500.0	774.7	12.5	-1.8	36.8	942.2	659.3	23.3	4.1	1.000235
8000.0	760.8	11.5	-2.6	37.2	928.7	658.1	24.7	5.0	1.000231
8500.0	747.1	10.5	-3.3	37.7	915.5	656.9	25.0	5.5	1.000226
9000.0	733.7	9.4	-4.1	38.3	902.6	655.6	20.4	4.2	1.000222
9500.0	720.3	7.8	-4.9	40.1	891.1	653.7	11.7	2.9	1.000219
10000.0	707.1	6.2	-5.7	42.0	879.7	651.9	338.4	1.3	1.000215
10500.0	694.0	4.8	-6.5	43.8	868.2	650.1	290.7	1.6	1.000212
11000.0	681.1	3.4	-7.3	45.5	856.3	648.5	240.0	2.9	1.000208
11500.0	668.4	2.0	-8.1	47.2	844.7	646.8	244.4	3.7	1.000205
12000.0	655.9	.6	-8.9	48.8	833.2	645.1	250.0	4.5	1.000201
12500.0	643.7	-.8	-9.8	50.5	821.9	643.5	259.7	5.5	1.000198
13000.0	631.4	-2.2	-10.4	53.4	810.0	641.8	265.9	6.7	1.000195
13500.0	619.3	-3.7	-11.0	56.7	799.3	640.1	267.0	8.0	1.000192
14000.0	607.5	-5.1	-11.6	60.0	788.2	638.3	267.7	9.4	1.000189
14500.0	595.9	-6.5	-12.3	63.3	777.3	636.6	268.1	11.5	1.000186
15000.0	584.5	-7.9	-13.0	66.6	766.6	634.9	268.3	13.9	1.000183
15500.0	573.1	-8.9	-18.3	46.3	754.9	633.6	268.9	16.0	1.000176
16000.0	562.0	-9.8	-26.6	23.9	743.2	632.3	269.7	17.7	1.000169
16500.0	551.0	-10.5	-28.1	21.9	730.6	631.5	270.7	19.2	1.000166
17000.0	540.2	-11.3	-29.4	20.5	718.4	630.6	273.6	19.0	1.000163
17500.0	529.5	-12.6	-26.4	30.4	707.7	629.0	276.5	18.8	1.000162
18000.0	519.1	-13.9	-24.5	40.2	697.2	627.4	277.4	19.3	1.000160
18500.0	508.8	-15.0	-25.0	42.1	686.2	626.1	277.6	20.1	1.000157
19000.0	498.7	-15.8	-27.4	36.1	674.6	625.1	277.5	21.3	1.000154
19500.0	488.7	-16.4	-30.1	29.3	662.9	624.3	277.1	23.0	1.000150
20000.0	478.9	-17.1	-33.4	22.5	651.3	623.5	276.9	24.5	1.000147
20500.0	469.2	-18.0	-36.3	18.2	640.4	622.4	277.6	24.7	1.000144
21000.0	459.7	-19.2	-37.1	18.7	630.6	620.8	278.6	24.9	1.000142
21500.0	450.3	-20.5	-37.9	19.3	620.9	619.2	279.2	25.2	1.000140
22000.0	441.1	-21.8	-38.7	19.9	611.4	617.6	279.7	25.4	1.000137
22500.0	432.2	-23.1	-39.6	20.4	602.1	616.0	280.1	26.0	1.000135
23000.0	423.4	-24.4	-40.4	21.0	592.9	614.4	280.4	27.1	1.000133
23500.0	414.6	-25.8	-41.2	21.7	583.7	612.8	280.6	28.2	1.000131

STATION ALTITUDE 4651.00 FEET MSL
17 MAY 82 0730 MDT
ASCENSION NO. 44

UPPER AIR DATA
1370030044
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	405.9	-27.1	-42.0	22.5	574.6	611.2	261.3	29.3	1.000129
24500.0	397.4	-28.4	-42.9	23.0	565.6	609.5	262.2	30.5	1.000127
25000.0	388.9	-29.7	-44.0	23.2	556.5	607.9	263.0	31.7	1.000125
25500.0	380.6	-31.0	-45.1	23.3	547.5	606.2	264.5	32.8	1.000123
26000.0	372.5	-32.3	-46.2	23.4	538.7	604.6	265.9	33.9	1.000121
26500.0	364.5	-33.6	-47.3	23.5	530.1	603.0	267.0	34.9	1.000119
27000.0	356.7	-34.9	-48.4	23.7	521.6	601.3	267.8	35.7	1.000117
27500.0	349.1	-36.3	-49.5	23.8	513.3	599.6	268.6	36.4	1.000115
28000.0	341.6	-37.6	-50.6	23.9	505.1	598.0	269.3	36.2	1.000113
28500.0	334.2	-38.9	-52.4	22.0**	496.9	596.3	270.0	35.7	1.000111
29000.0	326.8	-40.2	-55.5	17.4**	488.7	594.6	270.5	35.1	1.000109
29500.0	319.6	-41.5	-59.0	12.9**	480.6	592.9	269.7	34.3	1.000107
30000.0	312.5	-42.8	-63.4	8.3**	472.6	591.3	268.8	33.6	1.000105
30500.0	305.6	-44.1	-70.0	3.7**	464.8	589.6	269.1	33.8	1.000104
31000.0	298.8	-45.4			457.0	587.9	270.0	34.5	1.000102
31500.0	292.0	-46.7			449.1	586.3	271.1	35.0	1.000100
32000.0	285.3	-48.0			441.4	584.6	273.4	35.1	1.000098
32500.0	278.9	-49.2			433.8	583.0	275.6	35.2	1.000097
33000.0	272.4	-50.4			426.0	581.5	275.6	36.6	1.000095
33500.0	266.1	-51.4			418.1	580.1	275.1	38.3	1.000093
34000.0	260.0	-52.5			410.4	578.8	274.0	40.1	1.000091
34500.0	253.9	-53.5			402.8	577.4	272.4	42.1	1.000090
35000.0	248.0	-54.5			395.1	576.1	270.9	44.1	1.000088
35500.0	242.2	-54.3			385.6	576.3	269.3	46.0	1.000086
36000.0	236.6	-53.2			374.8	577.7	267.9	46.0	1.000083
36500.0	231.1	-53.0			365.7	578.0	268.8	50.1	1.000081
37000.0	225.7	-52.7			356.7	578.4	269.6	52.1	1.000079
37500.0	220.5	-52.5			348.1	578.7	270.5	53.0	1.000078
38000.0	215.3	-52.2			339.6	579.1	273.6	53.0	1.000076
38500.0	210.4	-52.1			331.5	579.2	276.5	52.8	1.000074
39000.0	205.5	-52.0			323.7	579.3	280.1	52.5	1.000072
39500.0	200.7	-52.0			316.2	579.3	278.9	52.3	1.000070
40000.0	196.1	-52.0			308.8	579.4	278.6	52.7	1.000069
40500.0	191.5	-52.0			301.6	579.4	278.4	53.1	1.000067
41000.0	187.1	-52.6			295.5	578.6	278.1	52.8	1.000066
41500.0	182.8	-52.8			288.9	578.2	277.7	52.5	1.000064
42000.0	178.5	-52.2			281.5	579.0	277.0	50.9	1.000063
42500.0	174.4	-52.0			274.7	579.3	275.6	48.6	1.000061
43000.0	170.3	-52.3			268.7	579.0	274.9	47.4	1.000060
43500.0	166.4	-52.6			262.8	578.6	274.5	47.6	1.000059

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4651.00 FEET MSL
17 MAY 82 0730 MDT
ASCENSION NO. 44

UPPER AIR DATA
13700300044
JALLEN

TABLE 9 Cont'd

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	102.5	-52.9			257.0	578.2	274.2	48.0	1.000057
44500.0	158.7	-53.3			251.5	577.6	274.1	48.5	1.000056
45000.0	155.0	-53.9			246.4	576.8	274.0	48.9	1.000055
45500.0	151.4	-54.6			241.3	576.0	273.1	46.3	1.000054
46000.0	147.9	-54.7			235.8	575.8	272.0	43.8	1.000053
46500.0	144.4	-54.6			230.2	575.9	271.3	41.8	1.000051
47000.0	141.0	-55.3			225.5	575.0	270.6	39.9	1.000050
47500.0	137.7	-56.0			220.8	574.1	269.9	38.0	1.000049
48000.0	134.4	-56.7			216.3	573.1	268.9	36.3	1.000048
48500.0	131.2	-57.4			211.9	572.2	268.4	34.6	1.000047
49000.0	128.1	-58.1			207.5	571.3	268.0	32.9	1.000046
49500.0	125.1	-58.8			203.3	570.4	267.6	31.9	1.000045
50000.0	122.1	-59.5			199.1	569.4	266.4	32.8	1.000044
50500.0	119.1	-60.4			195.1	568.2	265.1	33.8	1.000043
51000.0	116.2	-61.3			191.2	567.0	263.3	36.2	1.000043
51500.0	113.4	-62.2			187.3	565.8	261.2	38.6	1.000042
52000.0	110.7	-63.1			183.6	564.6	260.5	39.8	1.000041
52500.0	108.0	-64.0			179.9	563.4	270.0	40.4	1.000040
53000.0	105.3	-64.9			176.3	562.2	270.1	40.3	1.000039
53500.0	102.8	-65.8			172.7	560.9	274.6	39.3	1.000038
54000.0	100.3	-65.8			168.5	561.0	270.5	38.5	1.000038
54500.0	97.8	-65.0			165.7	562.1	277.8	37.8	1.000036
55000.0	95.5	-64.2			159.1	563.2	279.2	37.3	1.000035
55500.0	93.1	-63.4			154.6	564.3	278.7	33.3	1.000034
56000.0	90.9	-62.5			150.3	565.4	277.7	28.9	1.000033
56500.0	88.7	-61.7			146.1	566.4	276.1	24.5	1.000033
57000.0	86.5	-60.9			142.0	567.5	269.8	20.4	1.000032
57500.0	84.4	-60.1			138.0	568.6	267.1	16.7	1.000031
58000.0	82.4	-61.0			135.2	567.5	263.7	14.8	1.000030
58500.0	80.4	-62.1			132.7	566.0	259.0	13.4	1.000030
59000.0	78.4	-61.8			129.3	566.4	257.4	11.6	1.000029
59500.0	76.6	-60.3			125.3	568.3	278.0	6.5	1.000028
60000.0	74.7	-59.1			121.6	570.0	341.3	4.6	1.000027
60500.0	72.9	-59.6			119.0	569.3	26.3	7.6	1.000026
61000.0	71.2	-60.2			116.4	568.5	47.4	12.0	1.000026
61500.0	69.5	-60.6			113.9	568.0	55.7	16.8	1.000025
62000.0	67.8	-60.6			111.1	568.0	63.6	15.9	1.000025
62500.0	66.2	-60.5			108.4	568.1	72.7	15.4	1.000024
63000.0	64.6	-60.5			105.8	568.1	82.7	14.5	1.000024
63500.0	63.0	-60.5			103.3	568.2	94.8	13.6	1.000023

UPPER AIR DATA

STATION ALTITUDE 4,51•(0 FEET MSL
17 MAY 82 C730 MDT
ASCENSION NO. 44

1570030044
JALLEN

GEODETIC COORDINATES
33.10712 LAT DEG
106.49511 LON DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64000.0	61•5	-6•0•4			100.8	568•2	100•2	13.3	1.000022
64500.0	60•0	-6•0•4			98.3	568•2	109•2	11.5	1.000022
65000.0	58•6	-6•0•4			95.9	568•3	108•6	9.5	1.000021
65500.0	57•2	-6•0•3			93.6	568•3	105•9	7.8	1.000021
66000.0	55•8	-60•2			91.3	568•5	95•9	6.8	1.000020
66500.0	54•5	-59•9			89.0	568•9	83•1	6.1	1.000020
67000.0	53•2	-59•5			86.7	569•4	70•2	5.5	1.000019
67500.0	51•9	-59•2			84.5	569•9	80•6	4.8	1.000019
68000.0	50•7	-58•0			82.1	571•5	83•7	4.2	1.000018
68500.0	49•5	-56•9			79.7	572•9	77•5	3.0	1.000018
69000.0	48•3	-56•1			77.6	573•9	61•6	1.8	1.000017
69500.0	47•2	-55•3			75.5	574•9	47•9	2.0	1.000017
70000.0	46•1	-54•6			73.5	575•9	55•6	4.2	1.000016
70500.0	45•0	-53•8			71.5	576•9	58•3	6.3	1.000016
71000.0	44•0	-53•1			69.6	577•9	67•9	9.1	1.000015
71500.0	42•9	-52•3			67.7	578•9	74•4	12.1	1.000015
72000.0	41•9	-52•6			66.2	578•6	78•9	14.8	1.000015
72500.0	41•0	-53•0			64.8	578•1	84•6	16.0	1.000014
73000.0	40•0	-53•4			63.4	577•5	88•4	17.4	1.000014
73500.0	39•1	-53•8			62.1	577•0	88•9	17.9	1.000014
74000.0	38•2	-54•2			60.7	576•4	87•6	18.0	1.000014
74500.0	37•3	-54•6			59.4	575•9	86•7	17.9	1.000013
75000.0	36•4	-55•0			58.1	575•3	88•0	16.2	1.000013
75500.0	35•6	-55•5			56.9	574•8	89•7	14.4	1.000013
76000.0	34•7	-55•9			55.7	574•3	93•1	12.5	1.000012
76500.0	33•9	-56•3			54.5	573•7	102•3	10.3	1.000012
77000.0	33•1	-55•6			53.0	574•6	115•7	8.6	1.000012
77500.0	32•4	-54•5			51.6	576•0	122•9	7.4	1.000011
78000.0	31•6	-53•5			50.1	577•4	119•1	6.5	1.000011
78500.0	30•9	-52•4			48.7	578•8	114•0	5.5	1.000011
79000.0	30•2	-51•3			47.4	580•2	109•7	5.0	1.000011
79500.0	29•5	-50•7			46.1	581•0	105•8	4.6	1.000010
80000.0	28•8	-50•2			45.0	581•7	101•6	4.2	1.000010
80500.0	28•1	-49•7			43.9	582•4	95•3	3.7	1.000010
81000.0	27•5	-49•2			42.8	583•0	87•9	3.2	1.000010
81500.0	26•9	-48•7			41.7	583•7	77•7	2.8	1.000009
82000.0	26•3	-48•2			40.7	584•3	59•6	2.8	1.000009
82500.0	25•7	-47•7			39.6	583•0	43•6	3.1	1.000009
83000.0	25•1	-47•3			38.7	585•5	29•3	3.6	1.000009
83500.0	24•5	-47•1			37.6	585•8	15•6	4.5	1.000008

STATION ALTITUDE 4051.00 FEET MSL
17 MAY 62 0730 MDT
ASCENSION NO. 44

UPPER AIR DATA
1370030044
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
84000.0	24.0	-46.9			36.9	586.0	7.3	5.6	1.000008
84500.0	23.4	-46.7			36.0	586.3	1.4	6.5	1.000008
85000.0	22.9	-46.5			35.2	586.5	356.3	7.0	1.000008
85500.0	22.4	-46.3			34.4	586.8	351.9	7.6	1.000008
86000.0	21.9	-46.1			33.6	587.1			1.000007
86500.0	21.4	-45.9			32.8	587.3			1.000007
87000.0	20.9	-45.7			32.0	587.6			1.000007
87500.0	20.4	-45.5			31.3	587.8			1.000007
88000.0	20.0	-45.3			30.5	588.0			1.000007

STATION ALTITUDE 4051.00 FEET MSL
17 MAY 82 0730 MDT
ASCENSION NO. 44

MANDATORY LEVELS
1370030044
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 10

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEW POINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	4927.	17.0	1.4	35.	354.3	1.4
800.0	6617.	14.4	-.3	38.	25.0	2.2
750.0	8393.	10.7	-3.2	38.	25.6	5.7
700.0	10265.	5.4	-6.2	45.	283.6	1.1
650.0	12231.	-.1	-9.3	50.	255.1	5.0
600.0	14312.	-6.0	-12.1	62.	268.0	10.7
550.0	16526.	-10.6	-28.3	22.	270.9	19.2
500.0	18908.	-15.7	-27.0	37.	277.6	21.0
450.0	21495.	-20.6	-37.9	19.	279.2	25.2
400.0	24312.	-28.0	-42.6	23.	281.9	30.1
350.0	27406.	-36.1	-49.3	24.	288.5	35.4
300.0	30850.	-45.2			289.8	34.3
250.0	34761.	-54.2			291.5	45.4
200.0	39485.	-52.0			278.8	52.3
175.0	42319.	-52.0			276.1	49.1
150.0	45579.	-54.8			272.7	45.4
125.0	49378.	-58.8			257.8	31.9
100.0	53891.	-65.7			276.6	38.4
80.0	58409.	-62.3			255.2	13.2
70.0	61139.	-60.6			53.2	15.2
60.0	64289.	-60.4			109.3	11.6
50.0	68030.	-57.2			81.5	3.6
40.0	72727.	-53.4			88.2	17.3
30.0	78773.	-51.1			109.2	4.9
25.0	82699.	-47.2			28.4	3.6
20.0	87564.	-45.3				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4700.63 FEET MSL
17 MAY 82 0850 MDT
ASCENSION NO. 3

SIGNIFICANT LEVEL DATA
13701700S
AFSWC

GEODETIC COORDINATES
33.04686 LAT DEG
106.58581 LON DEG

TABLE 11

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
855.7	4700.6	13.1	-.2	40.0
850.0	4885.1	13.1	.2	41.0
831.6	5488.8	12.5	.6	44.0
824.9	5712.6	14.8	2.0	42.0
810.7	6196.1	15.9	2.3	40.0
759.0	8020.5	11.6	-1.2	41.0
700.0	10221.4	6.0	-4.7	46.0
647.2	12314.9	1.3	-9.6	44.0
611.2	13816.8	-3.2	-12.4	49.0
564.7	15854.3	-9.0	-12.3	77.0
558.8	16121.5	-9.6	-13.0	76.0
550.2	16515.3	-10.0	-18.0	52.0
515.8	18141.9	-13.5	-22.6	46.0
500.0	18918.0	-15.1	-25.6	40.0
475.2	20176.9	-17.6	-29.6	34.0
459.6	20996.9	-18.8	-31.3	32.0
400.0	24341.3	-27.8	-37.7	38.0
376.8	25745.9	-30.7	-41.4	34.0
348.6	27547.4	-35.1	-45.9	32.0
321.6	29378.9	-39.9	-49.9	33.0
300.0	30928.5	-44.1		
270.6	33181.2	-49.2		
250.0	34882.0	-51.7		
213.0	38304.7	-51.6		
200.0	39649.2	-52.2		
190.0	40742.9	-52.2		
182.2	41633.0	-54.1		
177.2	42222.4	-53.3		
174.9	42500.7	-51.7		
163.4	43949.1	-53.4		
150.0	45765.8	-53.1		
136.8	47717.5	-54.4		
128.6	49019.2	-55.8		
124.8	49646.6	-57.4		
119.7	50516.0	-57.5		
104.1	53389.6	-62.8		
100.0	54208.6	-61.7		
87.0	57056.6	-61.4		
83.9	57806.3	-57.4		
76.4	59748.7	-59.8		

STATION ALTITUDE 4700.63 FEET MSL
17 MAY 82
ASCENSION NO. 3 0850 MDT

SIGNIFICANT LEVEL DATA
13701 00Z
AFSWC

GEODETIC COORDINATES
33.64686 LAT DEG
106.58581 LON DEG

TABLE 11 Cont'd

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
70.0	61557.9	-58.8		
63.8	63463.9	-62.5		
50.0	68486.4	-57.8		
47.0	69785.8	-54.5		
33.6	76895.3	-54.2		
30.0	79321.2	-50.1		
25.4	82918.3	-50.1		
20.0	88128.6	-46.4		
10.0	103549.3	-41.3		
9.0	105928.5	-39.9		

STATION ALTITUDE 4700.63 FEET MSL
17 MAY 82
ASCENSION NO. 3 0850 MDT

UPPER AIR DATA
13701700U
AFSWC

TABLE 12

GEODETIC COORDINATES
33.84686 LAT DEG
106.58581 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4700.6	855.7	13.1	-.2	40.0	1038.6	660.8	.0	.0	1.000259
5000.0	846.5	13.0	.3	41.6	1027.7	659.9	13.2	.9	1.000258
5500.0	831.3	12.6	.7	43.9	1010.4	659.5	13.2	2.3	1.000255
6000.0	816.4	15.5	2.2	40.8	982.2	662.9	13.2	3.8	1.000251
6500.0	801.8	15.2	1.7	40.2	965.6	662.6	13.2	5.2	1.000247
7000.0	787.5	14.0	.8	40.4	952.4	661.2	12.4	5.4	1.000242
7500.0	773.4	12.8	-.2	40.7	939.4	659.8	11.2	5.3	1.000237
8000.0	759.6	11.6	-1.1	41.0	926.5	658.4	.9	4.8	1.000233
8500.0	745.7	10.4	-1.9	42.1	913.8	656.9	347.1	4.5	1.000229
9000.0	732.2	9.1	-2.7	43.2	901.3	655.4	330.8	4.0	1.000225
9500.0	718.8	7.8	-3.5	44.4	889.0	653.8	311.0	3.8	1.000221
10000.0	705.7	6.6	-4.4	45.5	876.8	652.3	299.0	3.1	1.000217
10500.0	692.7	5.4	-5.4	45.7	864.5	650.9	285.3	2.7	1.000213
11000.0	679.9	4.3	-6.5	45.3	852.0	649.5	285.9	3.1	1.000208
11500.0	667.3	3.1	-7.7	44.8	839.7	648.2	274.8	4.1	1.000204
12000.0	654.9	2.0	-8.9	44.3	827.6	646.8	260.5	6.3	1.000200
12500.0	642.7	.7	-9.9	44.6	816.0	645.3	249.4	8.8	1.000196
13000.0	630.5	-.8	-10.8	46.3	805.1	643.5	242.7	11.5	1.000193
13500.0	618.6	-2.3	-11.8	47.9	794.3	641.7	245.4	12.4	1.000190
14000.0	606.9	-3.7	-12.2	51.5	783.5	639.9	248.8	13.0	1.000187
14500.0	595.2	-5.1	-12.0	58.4	772.5	638.3	255.2	13.3	1.000185
15000.0	583.7	-6.6	-12.0	65.3	761.6	636.6	260.6	13.8	1.000183
15500.0	572.5	-8.0	-12.1	72.1	751.0	634.9	265.3	14.5	1.000180
16000.0	561.5	-9.3	-12.7	76.5	740.3	633.3	268.7	14.9	1.000177
16500.0	550.5	-10.0	-17.7	52.9	728.0	632.3	271.7	15.1	1.000170
17000.0	539.7	-11.0	-19.3	50.2	716.7	631.0	274.8	15.0	1.000167
17500.0	529.1	-12.1	-20.8	48.4	705.5	629.7	278.1	14.8	1.000164
18000.0	518.7	-13.2	-22.2	46.5	694.6	628.4	281.3	15.4	1.000160
18500.0	508.4	-14.2	-24.0	43.2	683.7	627.1	284.2	16.2	1.000157
19000.0	498.3	-15.3	-25.9	39.6	672.8	625.8	284.9	17.1	1.000154
19500.0	488.4	-16.3	-27.4	37.2	661.9	624.6	285.7	18.1	1.000151
20000.0	478.6	-17.2	-29.0	34.8	651.3	623.3	287.0	19.9	1.000148
20500.0	469.0	-18.1	-30.3	33.2	640.3	622.3	288.5	21.7	1.000145
21000.0	459.5	-18.8	-31.3	32.0	629.2	621.4	290.3	23.5	1.000143
21500.0	450.1	-20.2	-32.2	32.9	619.0	619.8	290.6	24.5	1.000140
22000.0	440.8	-21.5	-33.2	33.8	610.1	618.1	289.2	24.7	1.000138
22500.0	431.8	-22.8	-34.1	34.7	600.8	616.4	287.5	24.6	1.000136
23000.0	422.9	-24.2	-35.1	35.6	591.6	614.8	285.6	24.2	1.000134
23500.0	414.2	-25.5	-36.0	36.5	582.6	613.1	286.5	24.9	1.000131
24000.0	405.7	-26.9	-37.0	37.4	573.8	611.4	288.3	25.9	1.000129

STATION ALTITUDE 4700.3 FEET MSL
17 MAY 82 0850 MDT
ASCENSION NO. 3

UPPER AIR DATA
137017A005
AFSWC
TABLE 12 Cont'd

GEODETIC COORDINATES
33.04686 LAT DEG
106.58581 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24500.0	397.3	-28.1	-38.1	37.5	564.6	609.9	291.6	27.4	1.000127
25000.0	388.9	-29.2	-39.4	36.1	555.2	608.6	294.9	29.0	1.000125
25500.0	380.8	-30.2	-40.7	34.7	545.9	607.3	298.3	30.6	1.000123
26000.0	372.7	-31.3	-42.0	33.7	536.8	605.9	299.1	32.7	1.000121
26500.0	364.7	-32.5	-43.2	33.2	526.6	604.3	299.2	34.9	1.000118
27000.0	356.9	-33.8	-44.5	32.6	519.4	602.8	300.5	36.1	1.000116
27500.0	349.3	-35.0	-45.7	32.1	510.9	601.3	301.2	36.5	1.000114
28000.0	341.7	-36.3	-46.9	32.2	502.5	599.6	300.9	35.9	1.000113
28500.0	334.3	-37.6	-48.0	32.5	494.3	597.9	299.5	34.9	1.000111
29000.0	327.0	-38.9	-49.1	32.8	486.3	596.3	298.9	33.9	1.000109
29500.0	319.9	-40.2	-50.9	30.4**	478.4	594.6	297.1	33.9	1.000107
30000.0	312.8	-41.6	-55.6	19.8**	470.5	592.8	297.2	34.1	1.000105
30500.0	305.8	-42.9	-62.8	9.1**	462.8	591.1	294.0	34.4	1.000103
31000.0	299.0	-44.3			455.1	589.4	292.6	34.6	1.000101
31500.0	292.3	-45.4			447.0	587.9	291.7	34.7	1.000100
32000.0	285.6	-46.5			439.1	586.5	292.5	35.0	1.000098
32500.0	279.2	-47.7			431.3	585.0	294.2	35.4	1.000096
33000.0	272.9	-48.8			423.7	583.5	294.5	35.7	1.000094
33500.0	266.6	-49.7			415.6	582.4	294.6	36.0	1.000093
34000.0	260.5	-50.4			407.4	581.4	294.4	35.6	1.000091
34500.0	254.5	-51.1			399.3	580.5	294.3	35.3	1.000089
35000.0	248.6	-51.7			391.1	579.7	295.4	36.5	1.000087
35500.0	242.9	-51.7			382.0	579.8	296.6	37.8	1.000085
36000.0	237.3	-51.7			373.2	579.8	298.0	39.9	1.000083
36500.0	231.8	-51.7			364.5	579.8	300.0	41.8	1.000081
37000.0	226.4	-51.6			356.1	579.8	300.2	43.1	1.000079
37500.0	221.2	-51.6			347.8	579.8	299.6	44.5	1.000077
38000.0	216.1	-51.6			339.7	579.9	298.1	46.1	1.000076
38500.0	211.1	-51.7			332.0	579.8	296.3	47.5	1.000074
39000.0	206.2	-51.9			324.6	579.5	293.8	48.6	1.000072
39500.0	201.4	-52.1			317.4	579.2	291.9	49.3	1.000071
40000.0	196.7	-52.2			310.2	579.1	291.5	48.7	1.000069
40500.0	192.2	-52.2			303.0	579.1	291.1	48.2	1.000067
41000.0	187.7	-52.7			296.7	578.4	290.9	47.4	1.000066
41500.0	183.3	-53.8			291.2	577.0	289.9	46.6	1.000065
42000.0	179.1	-53.6			284.1	577.2	287.5	46.0	1.000063
42500.0	174.9	-51.7			275.2	579.7	283.2	45.8	1.000061
43000.0	170.8	-52.3			269.5	579.0	283.2	46.2	1.000060
43500.0	166.9	-52.9			263.9	578.2	281.4	46.7	1.000059
44000.0	163.0	-53.4			258.4	577.5	279.9	47.2	1.000058

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4700.63 FEET MSL
17 MAY 82 0850 MDT
ASCENSION NO. 3

UPPER AIR DATA
13701700U
AFSWC

TABLE 12 Cont'd

GEODETIC COORDINATES
33.04686 LAT DEG
106.58581 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44500.0	159.2	-53.3			252.3	577.6	278.0	47.7	1.000056
45000.0	155.5	-53.2			246.3	577.7	277.5	48.0	1.000055
45500.0	151.9	-53.1			240.5	577.8	277.0	48.3	1.000054
46000.0	148.4	-53.3			235.0	577.7	277.1	48.5	1.000052
46500.0	144.9	-53.6			229.9	577.3	277.1	48.1	1.000051
47000.0	141.5	-53.9			224.9	576.6	276.9	47.1	1.000050
47500.0	138.2	-54.3			220.0	576.4	276.7	45.8	1.000049
48000.0	135.0	-54.7			215.3	575.8	276.5	43.7	1.000048
48500.0	131.8	-55.2			210.7	575.1	275.7	41.7	1.000047
49000.0	128.7	-55.8			206.3	574.4	275.0	39.7	1.000046
49500.0	125.7	-57.0			202.6	572.7	270.0	37.9	1.000045
50000.0	122.7	-57.4			198.2	572.2	268.0	36.9	1.000044
50500.0	119.8	-57.5			193.5	572.1	266.1	36.1	1.000043
51000.0	116.9	-58.4			189.7	570.9	264.6	35.3	1.000042
51500.0	114.1	-59.3			185.9	569.7	263.6	34.6	1.000041
52000.0	111.4	-60.2			182.2	568.5	262.6	34.9	1.000041
52500.0	108.7	-61.2			178.6	567.2	260.1	35.9	1.000040
53000.0	106.1	-62.1			175.1	566.0	260.3	36.3	1.000039
53500.0	103.5	-62.7			171.3	565.2	262.6	36.0	1.000038
54000.0	101.0	-62.0			166.7	566.1	265.3	35.4	1.000037
54500.0	98.6	-61.7			162.4	566.5	269.3	34.0	1.000036
55000.0	96.2	-61.6			158.4	566.6	273.2	32.8	1.000035
55500.0	93.9	-61.6			154.6	566.7	276.1	32.4	1.000034
56000.0	91.6	-61.5			150.8	566.8	279.0	32.0	1.000034
56500.0	89.4	-61.5			147.1	566.8	280.3	27.6	1.000033
57000.0	87.2	-61.4			143.5	566.9	282.1	23.3	1.000032
57500.0	85.2	-59.0			139.5	570.1	280.1	18.2	1.000031
58000.0	83.1	-57.6			134.4	571.9	275.0	13.0	1.000030
58500.0	81.1	-58.3			131.5	571.1	270.5	10.2	1.000029
59000.0	79.2	-58.9			128.8	570.5	268.5	9.0	1.000029
59500.0	77.3	-59.5			126.1	569.4	272.7	6.9	1.000028
60000.0	75.5	-59.7			123.2	569.2	305.4	4.2	1.000027
60500.0	73.7	-59.4			120.1	569.6	4.5	4.3	1.000027
61000.0	71.9	-59.1			117.0	570.0	36.7	7.9	1.000026
61500.0	70.2	-58.8			114.1	570.3	71.4	13.6	1.000025
62000.0	68.5	-59.7			111.8	569.2	80.6	16.9	1.000025
62500.0	66.9	-60.6			109.6	567.9	88.4	19.7	1.000024
63000.0	65.3	-61.6			107.5	566.6	94.6	20.6	1.000024
63500.0	63.7	-62.5			105.3	565.5	102.6	19.0	1.000023
64000.0	62.2	-62.9			102.6	566.1	111.6	17.4	1.000023

STATION ALTITUDE 4700.63 FEET MSL
17 MAY 82 0850 MDT
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UPPER AIR DATA
137017000J
AFSWC

TABLE 12 Cont'd

GEODETIC COORDINATES
33.64686 LAT DEG
106.58581 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(IN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64500.0	60.7	-61.5			99.9	566.7	122.7	14.1	1.000022
65000.0	59.2	-61.1			97.3	567.4	139.5	11.6	1.000022
65500.0	57.8	-60.6			94.7	568.0	148.8	9.7	1.000021
66000.0	56.4	-60.1			92.3	568.6	160.3	8.0	1.000021
66500.0	55.1	-59.7			89.8	569.2	160.1	7.0	1.000020
67000.0	53.7	-59.2			87.5	569.9	152.3	6.2	1.000019
67500.0	52.5	-58.7			85.2	570.5	142.5	5.5	1.000019
68000.0	51.2	-58.3			83.0	571.1	130.6	5.0	1.000018
68500.0	50.0	-57.8			80.8	571.7	119.5	4.8	1.000018
69000.0	48.8	-56.5			78.5	573.4	113.5	4.6	1.000017
69500.0	47.6	-55.2			76.2	575.1	107.1	4.5	1.000017
70000.0	46.5	-54.5			74.1	576.1	97.5	4.7	1.000017
70500.0	45.4	-54.5			72.4	576.1	88.7	5.3	1.000016
71000.0	44.4	-54.4			70.7	576.1	83.5	6.0	1.000016
71500.0	43.3	-54.4			69.0	576.2	87.9	7.3	1.000015
72000.0	42.3	-54.4			67.4	576.2	91.0	8.6	1.000015
72500.0	41.3	-54.4			65.8	576.2	96.1	9.8	1.000015
73000.0	40.4	-54.4			64.3	576.2	102.3	11.0	1.000014
73500.0	39.4	-54.3			62.6	576.3	107.2	12.4	1.000014
74000.0	38.5	-54.3			61.3	576.3	108.3	12.4	1.000014
74500.0	37.6	-54.3			59.9	576.3	109.2	12.3	1.000013
75000.0	36.7	-54.3			58.5	576.4	110.4	12.0	1.000013
75500.0	35.9	-54.3			57.1	576.4	112.6	11.1	1.000013
76000.0	35.1	-54.2			55.8	576.4	115.1	10.2	1.000012
76500.0	34.2	-54.2			54.5	576.4	117.6	9.5	1.000012
77000.0	33.4	-54.0			53.2	576.7	120.6	8.9	1.000012
77500.0	32.7	-53.2			51.7	577.8	122.7	8.4	1.000012
78000.0	31.9	-52.3			50.3	578.9	123.6	8.0	1.000011
78500.0	31.2	-51.5			49.0	580.0	124.7	7.6	1.000011
79000.0	30.5	-50.6			47.7	581.1	124.7	7.1	1.000011
79500.0	29.8	-50.1			46.5	581.8	116.3	6.5	1.000010
80000.0	29.1	-50.1			45.4	581.8	110.7	6.0	1.000010
80500.0	28.4	-50.1			44.4	581.8	101.6	5.5	1.000010
81000.0	27.8	-50.1			43.4	581.8	90.9	4.9	1.000010
81500.0	27.1	-50.1			42.4	581.8	77.7	4.6	1.000009
82000.0	26.5	-50.1			41.4	581.8	63.0	4.5	1.000009
82500.0	25.9	-50.1			40.4	581.8	50.4	4.7	1.000009
83000.0	25.3	-50.0			39.5	581.9	38.6	5.2	1.000009
83500.0	24.7	-49.7			38.6	582.4	28.2	5.2	1.000009
84000.0	24.2	-49.3			37.6	582.8	1.6	5.8	1.000008

STATION ALTITUDE 4700.63 FEET MSL
17 MAY 82 0850 MDT
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UPPER AIR DATA
137017000S
AFSWC

TABLE 12 Cont'd

GEODETIC COORDINATES
33.64686 LAT DEG
106.56581 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES TRUE)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
84500.0	25.6	-49.0			36.7	583.3	347.4	6.8	1.000008
85000.0	25.1	-48.6			35.8	583.8	337.6	7.6	1.000008
85500.0	22.6	-48.3			35.0	584.2	329.6	8.1	1.000008
86000.0	24.1	-47.9			34.1	584.7	322.7	8.8	1.000008
86500.0	21.6	-47.6			33.3	585.1	318.6	9.4	1.000007
87000.0	21.1	-47.2			32.5	585.6	322.6	9.8	1.000007
87500.0	20.6	-46.8			31.7	586.1	326.2	10.3	1.000007
88000.0	20.1	-46.5			30.9	586.5	329.6	10.7	1.000007
88500.0	19.7	-46.3			30.2	586.6	332.2	11.3	1.000007
89000.0	19.2	-46.1			29.5	587.0	334.6	11.9	1.000007
89500.0	18.8	-45.9			28.8	587.2	336.7	12.5	1.000006
90000.0	18.4	-45.8			28.2	587.4	340.0	12.0	1.000006
90500.0	18.0	-45.6			27.5	587.6	346.3	10.3	1.000006
91000.0	17.6	-45.5			26.9	587.9	354.9	8.8	1.000006
91500.0	17.2	-45.3			26.3	588.1	5.7	7.5	1.000006
92000.0	16.8	-45.1			25.7	588.3	8.6	6.0	1.000006
92500.0	16.4	-45.0			25.1	588.5	13.4	4.5	1.000006
93000.0	16.1	-44.8			24.5	588.7	23.1	3.0	1.000005
93500.0	15.7	-44.6			23.9	588.9	28.7	2.6	1.000005
94000.0	15.4	-44.5			23.4	589.1	29.1	2.6	1.000005
94500.0	15.0	-44.3			22.9	589.4	29.5	2.6	1.000005
95000.0	14.7	-44.1			22.3	589.6	27.7	2.9	1.000005
95500.0	14.4	-44.0			21.8	589.8	23.0	3.9	1.000005
96000.0	14.0	-43.8			21.3	590.0	20.3	5.0	1.000005
96500.0	13.7	-43.6			20.8	590.2	18.5	6.1	1.000005
97000.0	13.4	-43.5			20.4	590.4	18.9	6.5	1.000005
97500.0	13.1	-43.3			19.9	590.6	19.4	6.9	1.000004
98000.0	12.8	-43.1			19.4	590.8	20.0	7.2	1.000004
98500.0	12.5	-43.0			19.0	591.1	20.4	7.5	1.000004
99000.0	12.3	-42.8			18.6	591.3	18.2	6.6	1.000004
99500.0	12.0	-42.6			18.1	591.5	15.0	5.6	1.000004
100000.0	11.7	-42.5			17.7	591.7	10.6	4.7	1.000004
100500.0	11.5	-42.3			17.3	591.9	1.9	3.8	1.000004
101000.0	11.2	-42.1			16.9	592.1	328.2	4.2	1.000004
101500.0	11.0	-42.0			16.5	592.3	306.1	5.6	1.000004
102000.0	10.7	-41.8			16.1	592.5	294.0	7.6	1.000004
102500.0	10.5	-41.6			15.8	592.8			1.000004
103000.0	10.2	-41.5			15.4	593.0			1.000003
103500.0	10.0	-41.3			15.1	593.2			1.000003
104000.0	9.8	-41.0			14.7	593.5			1.000003

STATION ALTITUDE 4700.63 FEET MSL
17 MAY 82 0850 MDT
ASCENSION NO. 3

UPPER AIR DATA
137017000
AFSWC
TABLE 12 Cont'd

GEODETIC COORDINATES
33.64686 LAT DEG
106.58581 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
104500.0	9.6	-40.7			14.4	595.9			1.000003
105000.0	9.4	-40.4			14.0	594.3			1.000003
105500.0	9.2	-40.2			13.7	594.7			1.000003

STATION ALTITUDE 4700.63 FEET MSL
17 MAY 62
ASCENSION NO. 3 0950 MDT

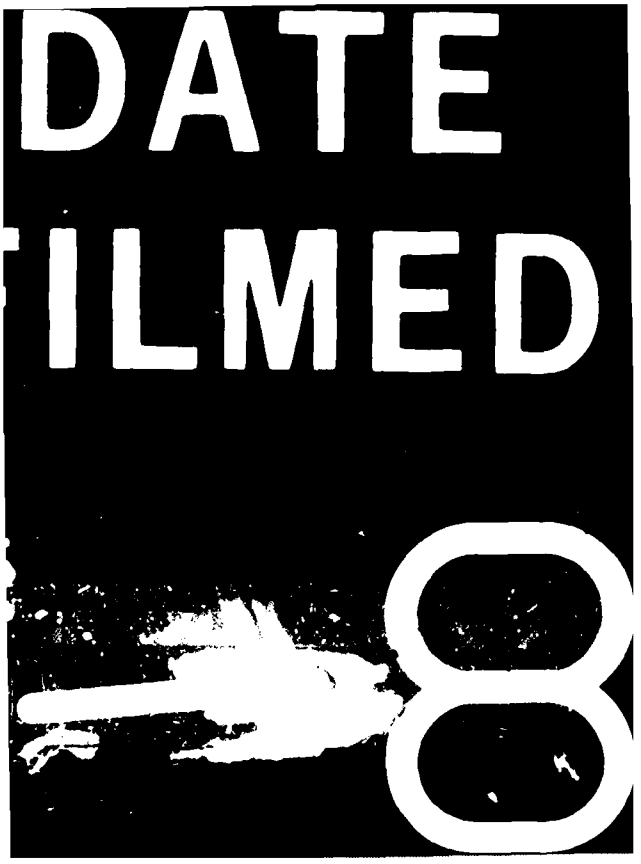
MANDATORY LEVELS
13701700[illegible]
AFSWC

GEODETIC COORDINATES
33.64686 LAT DEG
106.58581 LON DEG

TABLE 13

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	*WIND DATA DIRECTION DEGREES(TN)	*WIND DATA SPEED KNOTS
850.0	4882.	13.1	.2	41.	13.2	.5
800.0	6562.	15.0	1.0	40.	13.2	5.4
750.0	8341.	10.8	-1.7	42.	351.0	4.6
700.0	10212.	6.0	-4.7	40.	292.2	2.8
650.0	12189.	1.6	-9.3	44.	256.5	7.2
600.0	14282.	-4.6	-12.1	56.	252.6	13.2
550.0	16505.	-10.0	-18.0	52.	271.8	15.1
500.0	18893.	-15.1	-25.6	40.	284.8	16.9
450.0	21482.	-20.2	-32.2	33.	290.6	24.5
400.0	24303.	-27.8	-37.7	36.	290.5	26.9
350.0	27409.	-34.9	-45.6	32.	301.2	30.6
300.0	30871.	-44.1			292.8	34.6
250.0	34810.	-51.7			295.1	36.1
200.0	39558.	-52.2			291.8	49.1
175.0	42385.	-51.8			285.3	45.8
150.0	45648.	-53.1			277.1	43.4
125.0	49476.	-57.3			269.5	37.6
100.0	54047.	-61.7			266.8	34.8
80.0	58608.	-58.6			269.3	9.5
70.0	61353.	-58.8			71.9	14.0
60.0	64493.	-61.3			126.4	13.0
50.0	68235.	-57.8			119.9	4.8
40.0	72915.	-54.4			104.1	11.5
30.0	78990.	-50.1			121.1	6.8
25.0	82898.	-49.9			31.3	5.2
20.0	87723.	-46.4			330.2	10.8
15.0	94021.	-44.3			29.5	2.6
10.0	102997.	-41.3				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.


DATE
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